

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	1	"20070265174".pn.	US-PGPUB; USPAT	OR	OFF	2009/01/30 19:11
S2	24	"3467604".pn. or "4169023".pn. or "4501835".pn. or "4654235".pn. or "5208111".pn. or "5711915".pn. or "5807636".pn. or "5939323".pn. or "6402918".pn. or "6468657".pn. or "6610789".pn. or "6841054".pn. or "6860980".pn. or "7101947".pn. or "20030078388".pn. or "20030215626". pn. or "20040022691".pn. or "20040060481".pn. or "20040084312". PN. OR "20040149572".PN. OR "20040265603".PN. OR "20050025675".PN. OR "20050282925".PN. OR "20060065529".PN.	US-PGPUB; USPAT	OR	OFF	2009/02/03 15:05
S3	25818	((electrolyte or polyelectrolyte) and (fluoro or fluorine or tetrafluoroethylene or TFE or perfluoro \$))	US-PGPUB; USPAT	OR	OFF	2009/02/03 15:58
S4	375	((electrolyte or polyelectrolyte) and (fluoro or fluorine or tetrafluoroethylene or TFE or perfluoro \$)).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/03 15:58
S5	30	((JOSEPH) near2 (SCHLENOFF)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/03 15:59
S6	6	((JOSEPH) near2 (SCHLENOFF)).INV.	EPO; JPO; DERWENT	OR	OFF	2009/02/03 15:59
S7	19	S5 not S2	US-PGPUB; USPAT; USOCR	OR	OFF	2009/02/03 16:00
S8	11	S5 not S7	US-PGPUB; USPAT	OR	OFF	2009/02/03 16:07
S9	1	"20060286424".pn.	DERWENT	OR	OFF	2009/02/03 16:25
S10	64	((electrolyte or polyelectrolyte) and (fluoro or fluorine or tetrafluoroethylene or TFE or perfluoro \$)).ab. and (charg\$ or positive\$ or negative\$ or opposite\$).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/04 10:50
S11	554	(electrolyte or polyelectrolyte).ab. and ((fluoro or fluorine or tetrafluoroethylene or TFE or perfluoro \$) and (charg\$ or positive\$ or negative \$ or opposite\$)).clm.	US-PGPUB; USPAT	OR	OFF	2009/02/04 10:56
S12	52	((fluoro or fluorin\$) and charg\$ and polymer).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/04 13:33
S13	2	((fluoro or fluorin\$) and charg\$ and polyelectrolyte).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/04 13:44

S14	1	"20050287111".pn.	US-PGPUB; USPAT	OR	OFF	2009/02/06 12:54
S15	3	pfpvp	US-PGPUB; USPAT	OR	OFF	2009/02/06 13:53
S16	1798	(fluoropyrid\$ or fluorinated or fluorine or fluorin\$7) near9 (pyridin\$5)	US-PGPUB; USPAT	OR	OFF	2009/02/06 13:57
S17	8447	polyelectrolyte	US-PGPUB; USPAT	OR	OFF	2009/02/06 13:57
S18	30	S16 and S17	US-PGPUB; USPAT	OR	OFF	2009/02/06 13:58
S19	3625	428/421.ccls. or 428/422.ccls.	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:16
S20	121794	electrolyte or polyelectrolyte	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:17
S21	135	S19 and S20	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:17
S22	3619333	(electrolyte or polyelectrolyte or charge \$ or positive\$ or negative\$ or opposit \$)	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:19
S23	1753	S19 and S22	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:19
S24	45483	(electrolyte or polyelectrolyte) and charge\$ and (positive\$ or negative\$ or opposit\$)	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:20
S25	40	S19 and S24	US-PGPUB; USPAT	OR	OFF	2009/02/06 14:20
S26	1	"20070265174".pn.	US-PGPUB; USPAT	OR	OFF	2009/02/06 15:42
S27	2501639	friction or rotating or moving or particle	US-PGPUB; USPAT	OR	OFF	2009/02/06 15:43
S28	1	S26 and S27	US-PGPUB; USPAT	OR	OFF	2009/02/06 15:44
S29	1	"20020086932".pn.	US-PGPUB; USPAT	OR	OFF	2009/02/06 16:19
S30	109	(fluorin\$ near5 pyridinium)	US-PGPUB; USPAT	OR	OFF	2009/02/06 17:15
S31	2	(pyridinium and polyelectrolyte).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/06 17:59
S32	13	(pyridinium and (electrolyte or polyelectrolyte)).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/06 18:01
S33	479	(pyridinium same (electrolyte or polyelectrolyte))	US-PGPUB; USPAT	OR	OFF	2009/02/06 18:03
S34	334503	(Fluoro or fluorin\$)	US-PGPUB; USPAT	OR	OFF	2009/02/06 18:16
S35	239	S33 and S34	US-PGPUB; USPAT	OR	OFF	2009/02/06 18:16
S36	1	"20040265603".pn.	DERWENT	OR	OFF	2009/02/06 18:22
S37	0	(magnetic adj disc).ab. and (polyelectrolyte).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/06 19:41
S38	1005	(magnetic adj disc).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/06 19:42

S39	868	(magnetic adj disc).ab.	USPAT	OR	OFF	2009/02/06 19:42
S40	9	(magnetic adj disc).ab. and coating.ab.	USPAT	OR	OFF	2009/02/06 19:45
S41	3	(magnetic adj disc).ab. and (coated or coating).ab. and method.ab.	USPAT	OR	OFF	2009/02/06 19:46
S42	113	(magnetic adj disc).ab. and method.ab.	USPAT	OR	OFF	2009/02/06 19:49
S43	324	(polytetrafluoroethylene same charg\$ same particle)	US-PGPUB; USPAT	OR	OFF	2009/02/06 20:30
S44	45	(polytetrafluoroethylene same charg\$ same particle) and (fluorin\$ near8 polymer)	US-PGPUB; USPAT	OR	OFF	2009/02/06 20:46
S45	1104724	film	US-PGPUB; USPAT	OR	OFF	2009/02/06 21:12
S46	33	S44 and S45	US-PGPUB; USPAT	OR	OFF	2009/02/06 21:12
S47	1	"20080177002".pn.	US-PGPUB; USPAT	OR	OFF	2009/02/06 21:48
S48	578	Zonyl and fluorosurfactant and polymer\$	US-PGPUB; USPAT	OR	OFF	2009/02/09 08:52
S49	113	Zonyl same fluorosurfactant same polymer\$	US-PGPUB; USPAT	OR	OFF	2009/02/09 08:52
S50	1	"5380644".pn.	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:01
S51	163	(moving near5 metal) same (fluoro or fluorin\$ or electrolyte or polyelectrolyte)	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:28
S52	19949	"508"/\$7.ccls.	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:48
S53	433289	(fluoro or fluorin\$ or electrolyte or polyelectrolyte)	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:48
S54	1822	S52 and S53	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:49
S55	46367	(fluoro or fluorin\$ or electrolyte or polyelectrolyte).ab.	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:49
S56	220	S52 and S55	US-PGPUB; USPAT	OR	OFF	2009/02/09 09:49
S57	2105927	metal	US-PGPUB; USPAT	OR	OFF	2009/02/09 10:27
S58	2258287	metal or metallic	US-PGPUB; USPAT	OR	OFF	2009/02/09 10:27
S59	175	S56 and S58	US-PGPUB; USPAT	OR	OFF	2009/02/09 10:27
S60	3578254	(charge\$ or positive\$ or negative\$ or opposite\$)	US-PGPUB; USPAT	OR	ON	2009/02/09 10:35
S61	97	S59 and S60	US-PGPUB; USPAT	OR	ON	2009/02/09 10:36
S62	1	"4497720".pn.	US-PGPUB; USPAT	OR	ON	2009/02/09 11:31
S63	924949	particle	US-PGPUB; USPAT	OR	ON	2009/02/09 11:31

S64	0	S62 and S63	US-PGPUB; USPAT	OR	ON	2009/02/09 11:31
S65	1	WO-03014234-\$.DID.	DERWENT	OR	ON	2009/02/09 11:40
S66	974	525/199.ccls. or 525/200.ccls.	US-PGPUB; USPAT; DERWENT	OR	ON	2009/02/09 11:53
S67	430	S60 and S66	US-PGPUB; USPAT	OR	ON	2009/02/09 11:54
S68	424274	(charge\$ or positive\$ or negative\$ or opposite\$).ab.	US-PGPUB; USPAT	OR	ON	2009/02/09 11:55
S69	16	S67 and S68	US-PGPUB; USPAT	OR	ON	2009/02/09 11:55
S70	1	"20030169227".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 11:57
S71	1389161	film	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 11:57
S72	1	S70 and S71	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 11:58
S73	1	"20070265174".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 13:06
S74	95373	(charged or charge) near9 particle	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 13:07
S75	1	S73 and S74	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 13:07
S76	8051	PDADMA or PFPVP or nafion	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 14:29
S77	7512	(PDADMA or PFPVP or nafion) and (electrolyte or polyelectrolyte or charge or charged or polymer)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 14:30
S78	1142	525/199.ccls. or 525/200.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 14:30
S79	8	S77 and S78	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/08 14:30
S80	1142	525/199.ccls. or 525/200.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 09:55
S81	173840	electrolyte or polyelectrolyte	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 09:55
S82	55	S80 and S81	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 09:55
S83	877332	(anionic\$ or cationic\$ or ioniz\$ or ionic \$ or cationiz\$ od anioniz\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:37
S84	324	S80 and S83	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:37
S85	5811	(pyridinium or ammonium) near9 (fluorinat\$ or fluorine\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:43
S86	21	S80 and S85	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:43
S87	5820	(pyridinium or ammonium or polycation \$ or polyanion\$) near9 (fluorinat\$ or fluorine\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:46
S88	21	S80 and S87	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:47

S89	13	(polycation\$ or polyanion\$) near9 (fluorinat\$ or fluorine\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:48
S90	11286	(polycation\$ or cation\$ or ionic\$ or ioniz\$ or pyridinium or ammonium) near9 (fluorinat\$ or fluorine\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:51
S91	505129	"525"/\$7.ccls. or "524"/\$7.ccls. or "428"/\$7.ccls. or "526"/\$7.ccls. or "528"/\$7.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:52
S92	2522	S90 and S91	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:53
S93	8232	(polycation\$ or cation\$ or ionic\$ or ioniz\$ or pyridinium or ammonium) near5 (fluorinat\$ or fluorine\$)	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:53
S94	1850	S91 and S93	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 10:53
S95	2	"6358665".pn. or "5608022".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 17:02
S96	199	(anion\$ near3 exchang\$) near9 fluorin\$	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 17:03
S97	1	"20070265174".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 18:14
S98	1	"4316789".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 18:17
S99	1	"5187038".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 18:58
S100	249006	fluorine	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 19:03
S101	0	S99 and S100	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 19:03
S102	1	"5736274".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 19:07
S103	1	"7357999".pn.	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 19:51
S104	18516	attapulgit	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 19:51
S105	0	S103 and S104	US-PGPUB; USPAT; USOCR	OR	ON	2009/08/10 19:51
S106	3704	428/421.ccls. or 428/422.ccls.	US-PGPUB; USPAT	OR	OFF	2009/08/11 15:56
S107	149842	electrolyte or polyelectrolyte	US-PGPUB; USPAT	OR	ON	2009/08/11 15:57
S108	168	S106 and S107	US-PGPUB; USPAT	OR	ON	2009/08/11 15:57
S109	1	"20070265174".pn.	US-PGPUB; USPAT	OR	OFF	2009/12/01 12:06
S110	481226	(counterion or carboxylic or sulfonic or perfluorotetradecanoate or perfluorotetradecanoic)	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/01 12:48
S111	1	S109 and S110	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/01 12:49
S112	33	((JOSEPH) near2 (SCHLENOFF)).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/01 12:49

S113	19	S110 and S112	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/01 12:49
S114	1276	((positive\$ and negative\$) or opposite \$) and (perfluoro\$ or perfluorina\$ or fluorinat\$ or fluorine) and (electrolyte or polyelectrolyte) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:24
S115	5159	428/421.ccls. or 428/422.ccls. or 525/199.ccls. or 525/200.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:26
S116	4	S114 and S115	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:26
S117	817	((((positive\$ and negative\$) or opposite \$) near9 charge\$) and (perfluoro\$ or perfluorina\$ or fluorinat\$ or fluorine) and (electrolyte or polyelectrolyte) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:28
S118	8	((((positive\$ and negative\$) or opposite\$) near9 charge\$) and (perfluoro\$ or perfluorina\$ or fluorinat \$ or fluorine) and (electrolyte or polyelectrolyte) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)).clm.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:29
S119	339431	"525"/\$7.ccls. or "428"/\$7.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:33
S120	59	S117 and S119	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 13:33
S121	745	508/106.ccls. or 508/588.ccls. or 508/589.ccls. or 508/590.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:04
S122	5508	((((positive\$ and negative\$) or opposite \$) near9 charge\$) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:05
S123	1	S121 and S122	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:05
S124	166039	((((positive\$ and negative\$) or opposite or oppositively) near9 charge \$) or polycation\$ or polyanion\$	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:07
S125	9	S121 and S124	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:08

S126	1912	((positive\$ and negative\$) or opposite or oppositely) near9 charge \$) and (electrolyte or polyelectrolyte) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:13
S127	162	S119 and S126	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:13
S128	1	S121 and S126	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:29
S129	2155	(((((positive\$ and negative\$) or opposite or oppositely) near9 charge \$)) or polycation\$ or polyanion\$) and (electrolyte or polyelectrolyte) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:36
S130	2155	(((((positive\$ and negative\$) or opposite or oppositely) near9 charge \$)) or polycation\$ or polyanion\$) and (electrolyte or polyelectrolyte) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:37
S131	1	S121 and S130	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:38
S132	2	S115 and S130	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:38
S133	191	S119 and S130	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:39
S134	29	S133 not S127	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 14:40
S135	2126	((positive\$ and negative\$) or opposite \$) near9 charge\$) and (perfluoro\$ or perfluorina\$ or fluorinat\$ or fluorine) and (counterion or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic) or (perfluorotetradecanoic) or (perfluorotetradecanoate) or perfluoroalkanesulfonic or pefluoroalkanecarboxylic)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:00
S136	170	S119 and S135	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:01
S137	6	S115 and S135	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:02
S138	166089	((positiv\$ and negativ\$) or opposite or oppositely) near9 charge\$) or polycation\$ or polyanion\$	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:06

S139	99	S115 and S138	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:06
S140	5873	508/106.ccls. or 508/588.ccls. or 508/589.ccls. or 508/590.ccls. or 428/421.ccls. or 428/422.ccls. or 525/199.ccls. or 525/200.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:29
S141	9239	((((positiv\$ and negativ\$) or opposite or oppositely) near9 charge\$) or polycation\$ or polyanion\$) and (counterion or perfluoroalkanesulfonic or perfluoroalkanecarboxylic or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic))	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:32
S142	24	"3467604".pn. or "4169023".pn. or "4501835".pn. or "4654235".pn. or "5208111".pn. or "5711915".pn. or "5807636".pn. or "5939323".pn. or "6402918".pn. or "6468657".pn. or "6610789".pn. or "6841054".pn. or "6860980".pn. or "7101947".pn. or "20030078388".pn. or "20030215626". pn. or "20040022691".pn. or "20040060481".pn. or "20040084312". PN. OR "20040149572".PN. OR "20040265603".PN. OR "20050025675".PN. OR "20050282925".PN. OR "20060065529".PN.	US-PGPUB; USPAT	OR	OFF	2009/12/01 15:57
S143	6	S141 and S142	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/01 15:58
S151	569	(electrolyte or polyelectrolyte) and charge\$ and (positive\$ or negative\$ or opposit\$) and (fluorinat\$ or fluorin\$ or fluoro or perfluoro or perfluorinat\$) and counterion	US-PGPUB; USPAT	OR	OFF	2009/12/02 14:57
S152	50845	"429"/\$7.ccls.	US-PGPUB; USPAT	OR	OFF	2009/12/02 14:58
S153	94	S151 and S152	US-PGPUB; USPAT	OR	OFF	2009/12/02 14:58
S154	267	429/316.ccls.	US-PGPUB; USPAT	OR	OFF	2009/12/02 15:30
S155	752573	counter or counterion	US-PGPUB; USPAT	OR	OFF	2009/12/02 15:30
S156	37	S154 and S155	US-PGPUB; USPAT	OR	OFF	2009/12/02 15:30
S157	1	"20040191504".pn.	US-PGPUB; USPAT	OR	OFF	2009/12/02 15:57
S158	752573	counterion or counter	US-PGPUB; USPAT	OR	OFF	2009/12/02 15:57
S159	0	S157 and S158	US-PGPUB; USPAT	OR	OFF	2009/12/02 15:57
S160	1	"20070265174".pn.	US-PGPUB; USPAT	OR	OFF	2009/12/03 14:57
S161	53	sulfonated adj ionomer	US-PGPUB; USPAT	OR	OFF	2009/12/03 14:58
S162	1	S160 and S161	US-PGPUB; USPAT	OR	OFF	2009/12/03 14:58



S163	580	film and polyelectrolyte and (perfluoro or fluoro or fluorine) and (charg\$ or opposit\$ or negative\$ or positive) and particle	US-PGPUB; USPAT	OR	OFF	2009/12/08 13:54
S164	1101	film and polyelectrolyte and (perfluoro or fluoro or fluorine) and (charg\$ or opposit\$ or negative\$ or positive) and particle	US-PGPUB; USPAT	OR	ON	2009/12/08 13:55
S165	3	(film and polyelectrolyte and (perfluoro or fluoro or fluorine) and (charg\$ or opposit\$ or negative\$ or positive) and particle).clm.	US-PGPUB; USPAT	OR	ON	2009/12/08 13:55
S166	152	(film and polyelectrolyte and ((perfluoro or fluoro or fluorine) same particle) and (charg\$ or opposit\$ or negative\$ or positive))	US-PGPUB; USPAT	OR	ON	2009/12/08 13:57
S167	102	film and polyelectrolyte and ((perfluoro or fluoro or fluorine) same particle) and (charg\$ same (opposit\$ or negative\$ or positive))	US-PGPUB; USPAT	OR	ON	2009/12/08 14:04
S168	281415	film and polyelectrolyte and ((perfluoro or fluoro or fluorine) same particle) and (charg\$ same (opposit\$ or negative\$ or positive)) and insoluble and nonmigrat\$ or migrat\$	US-PGPUB; USPAT	OR	ON	2009/12/08 14:08
S169	45	film and polyelectrolyte and ((perfluoro or fluoro or fluorine) same particle) and (charg\$ same (opposit\$ or negative\$ or positive)) and (nonmigrat\$ or migrat\$)	US-PGPUB; USPAT	OR	ON	2009/12/08 14:08
S171	3753	428/421.ccls. or 428/422.ccls.	US-PGPUB; USPAT	OR	OFF	2009/12/09 10:30
S172	447686	(charg\$ same (opposit\$ or negative\$ or positive\$)) or (polyelectrolyte or electrolyte) or (polyanion or polycation)	US-PGPUB; USPAT	OR	ON	2009/12/09 10:32
S173	325	S171 and S172	US-PGPUB; USPAT	OR	ON	2009/12/09 10:33
S174	28284	counterion	US-PGPUB; USPAT	OR	ON	2009/12/09 10:45
S175	1	"6562446".pn.	US-PGPUB; USPAT	OR	ON	2009/12/09 10:46
S176	0	S174 and S175	US-PGPUB; USPAT	OR	ON	2009/12/09 10:46
S177	990127	particle	US-PGPUB; USPAT	OR	ON	2009/12/09 10:47
S178	1	S175 and S177	US-PGPUB; USPAT	OR	ON	2009/12/09 10:48

## EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp

S144	4261	508/106.ccls. or 508/588.ccls. or 508/589.ccls. or 508/590.ccls. or 428/421.ccls. or 428/422.ccls. or 525/199.ccls. or 525/200.ccls.	USPAT; UPAD	OR	ON	2009/12/01 15:30
S145	3490	(((((positiv\$ and negativ\$) or opposite or oppositively) near9 charge\$) or polycation\$ or polyanion\$) and (counterion or perfluoroalkanesulfonic or perfluoroalkanecarboxylic or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic))	USPAT; UPAD	OR	ON	2009/12/01 15:33
S146	0	S144 and S145	USPAT; UPAD	OR	ON	2009/12/01 15:33
S147	3625	(((((positiv\$ and negativ\$) or opposite or oppositively) same charge\$) or polycation\$ or polyanion\$) and (counterion or perfluoroalkanesulfonic or perfluoroalkanecarboxylic or (perfluoroalkane adj sulfonic) or (perfluoroalkane adj carboxylic))	USPAT; UPAD	OR	ON	2009/12/01 15:34
S148	1	S144 and S147	USPAT; UPAD	OR	ON	2009/12/01 15:34
S149	220066	"525"/\$7.ccls. or "428"/\$7.ccls.	USPAT; UPAD	OR	ON	2009/12/01 15:35
S150	288	S147 and S149	USPAT; UPAD	OR	ON	2009/12/01 15:36
S170	17	film and polyelectrolyte and ((perfluoro or fluoro or fluorine) same particle) and (charg\$ same (opposit\$ or negative\$ or positive)) and (nonmigrat\$ or migrat\$)	USPAT; UPAD	OR	ON	2009/12/08 14:23

12/ 9/ 2009 2:53:49 PM

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